

Vita
(As of May 2004)

JAMES K. LOWE

Current Position:

Associate Professor, Operations Research and POM
Director of Assessment, Management
Dean's Equipment Advisory Board member
Department of Management
United States Air Force Academy, CO

Coordinates and facilitates assessment of DFM goals. Administers, evaluates, and provides feedback of faculty, graduates, and cadet assessment instruments. Leads the oversight of Operations Research curriculum for the four supporting departments. Advises the Dean regarding an annual \$1.3M equipment fund expenditure supporting entire faculty. Advises the Department Staff regarding POM educational outcomes. Plans, designs, and teaches advanced management courses for our 400 majors, responsible for course content, delivery, and evaluation.

Previous Academic Positions:

1998 - present	Associate Professor of OR and Management Department of Management United States Air Force Academy, CO
1997 – 1998	Assistant Professor of OR and Management Department of Management United States Air Force Academy, CO
1994-1997	Associate Military Professor of OR and Management Department of Management United States Air Force Academy, CO
1991-1994	Assistant Professor of Resources Management Defense Resources Management Institute Naval Postgraduate School, Monterey, CA
1987-1991	Assistant Military Professor of OR and Management Department of Management United States Air Force Academy, CO

Education:

Doctor of Philosophy, Management, 1984
Georgia Institute of Technology

Master of Science, Engineering Management 1981
Georgia Institute of Technology

Bachelor of Science, Civil Engineering 1976
United States Air Force Academy, CO

Honors/Recognition:

Member, Omega Rho National Honor Society National Board

Western U.S. Region Representative of the national honor society of Operations Research, Mar 2004 -

Associate Editor, INFORMS Transactions on Education

Education journal of professional international society, Nov 2003 -

Member, Independence Fund Board

Non-Profit board encourages community improvement initiatives; board members allocate funds to new initiatives, 2002 -.

F. Theodore Helmer Award for Teaching Excellence

Recognition of teaching excellence in creating and administering “OR for All”, a core OR course, Spring 2003

American Council on Education Annual Academic Excellence and Cost Mgt. Award

One of two USAF Academy nominees in 1999-2000.

Military Operations Research Society Annual Richard H. Barchi Research Award

Cost Analysis track nominee – Paper appeared in Military Operations Research, 2000

MORSS Outstanding Presentation

Cost Analysis track, presentation during West Point MORSS, June 1999

Member, National Council

International Military Applications Society (INFORMS), elected in June 1997

Resolution of Appreciation

Signed by Mayor Isaacs, presented by the Colorado Springs City Council-Aug 1996

Certificate of Appreciation

Colorado Springs Department of Transportation, presented by Director in May 1996

Taylor Award

USAF Department of Management Award for Research Excellence, 1994

Outstanding Educator

USAF Premier Departmental Educator Award for 1990-91

F. Theodore Helmer Award for Teaching Excellence

USAF Departmental Award for Teaching Excellence, 1989

Work in Progress (major areas of on-going research and collaborators):

Operations Research Case Studies (Armacost)

Operations Research introductory text (Armacost)

Assessment (Green)

Time Value of Benefits Evaluation within Decision Analysis (Green)

Mobilization Optimization Models and Methodologies (Armacost)

Consulting Activities: (1998-present)

- 2004 USAFA/DP. Assisted in the development of USAFA response to Agenda for Change USAFA/AFROTC Lineal List initiative.
- 2003 USAFA/DP. AFSC Classification Process.
- 2003 Monument Colorado, School District 38, developed strategies of analysis supporting assessment efforts.
- 2003 USAFA Dean's Equipment Board (ongoing, see 1998).
- 2003 Manitou Recycles. Assess community support for recycling, presentation to Mayor and City Council endorsement of recycling initiative.
- 2003 Headquarters, Air Force Officer and Accession Training School (AFOATS). Viability study of ROTC detachments (see 1998).
- 2002 USAFA Dean's Equipment Board (ongoing, see 1998).
- 2001 USAFA Personnel Assignments. Develop a methodology to optimize the first-term assignment of graduating cadets.
- 2001 USAFA Personnel Assignments. Develop a methodology of evaluating the four-year performance of graduating cadets for AFSC selection.
- 2000 Provided an assessment of US Space Foundation Strategic Goals
- 1999 US Swimming Association. Developing a value-based hierarchy to assist in prioritizing budget proposals for this \$13M annual operation.
- 1998 Headquarters, Air Force Officer and Accession Training School (AFOATS). Viability study of ROTC detachments. Developed a viability hierarchy and provided recommendations for closure/expansion decisions within ROTC.
- 1998 USAFA Dean's Equipment Board (DFEB). Developed/Revised value hierarchy to assess equipment requests. Objective rank ordering provided justification for fallout funds - ongoing consultation as member of Dean's Equipment Board
- 1998 US-Russian Bilateral Environmental Management Courses. Provided 2 hour Multi-Criteria Decision-Making Instruction supporting a 5 day executive level course for senior Russian environmental officers. *Most requested topic from first Course.*
- 1998 City of Colorado Springs Airport, City of Colorado Springs Utilities, ENT Federal Credit Union, Current, Inc., Paper Direct, Inc., USAA, Inc. Cadet Consultations.

Teaching Experience:

U.S. Air Force Academy	Topic	Dates
Management 491	Mgt. Information Systems	1988/89
Management 477	Production and Operations Mgt.	
	1990/91/94/95/98/99/00/01/02	
Management 472	Strategic Management	1998
Management 371	Analytic Decision Modeling	1987/88/95/96
Management 341	Intro to Financial Accounting	1989/90/91
Management 311	Quantitative Methods for Mgrs.	1990/91
Management 310	Analytic Techniques for Mgrs.	1989/90/91
Management 210	Introductory Management	1995/96/97
Operations Research 420	Case Studies in OR (Capstone)	

1991/95/96/97/98/99/00/01
 Operations Research 310 Intro to OR Modeling 1994/95/01/02/03/04

Naval Postgraduate School	Offerings	Dates
Defense Resources Mgt. - 4 week - Course	13	1992-1994
International Defense Mgt. - 11 week – Course	5	1992-1994
Senior Flag Rank Def Mgt. - 4 week - Course	3	1992-1994
Mobile International Mgt. - 2 week - Course	8	1992-1994

Colorado Tech University	Topics	Dates
Management 705 (Doctoral)	Systems Analysis	1995

University of Colorado Springs	Topics	Dates
Management 675	Operations Mgt.	1997/98/99
Management 625	Intro to Production	1997/98
Management 325	Statistics for Business	1994

Organizational & Professional Societies:

Institute for Operations Research and Management Science (INFORMS)	
Faculty Representative, Omega Rho International Honor Society	1998-Present
Military Applications Society National Council	1997-2001
Member, Omega Rho International Honor Society	1996
Member of INFORMED, Society Education Division	1996-Present
Member of Military Applications Society (MAS)	1996-Present
Society of Cost Estimators of American	1997-Present
American Production and Inventory Control Society	1996-Present
Western Casewriters Association, member	1994 – Present
Decision Science Institute, member	1989-91
Academy of Management, member	2001-Present

Other Professional Involvement:

Dean's Equipment Board	2000-Present
NCAA Faculty Representative: Intercollegiate Ice Hockey	1994-2002
NCAA Faculty Representative: Intercollegiate Water Polo	2000-2001
Department of Management:	
Deputy Department Head and Senior Staff member	1994-97
Deputy for Operations Research & Research Director	1989-90
Operations Research (OR) Program:	
Chair, Curriculum Committee	1998-Present
Chair, OR Working Group	1996-97

Experience:

Civil Engineering Officer	England AFB, LA	1976-79
Student	Georgia Tech, GA	1979-84
Chief of Concept Development	Maxwell AFB, AL	1984-85
Chief of Engineering Design	Lajes Field, Azores	1985-87
Instructor, Assistant Prof. of Mgt.	USAFA, CO	1987-91
Asst. Prof. of Resources Mgt. DRMI,	NPS, CA	1991-94
Associate Prof. of Mgt./OR	USAFA, CO	1994---

PUBLICATIONS and PRESENTATIONS

INVITED:

Lowe, James K. "OR Consulting at the Undergraduate Level." Joint International Canadian Operations Research Society & INFORMS Meeting. Banff, Alberta, CA. May 2004. (presentation)

Lowe, James K. "Beyond Teams" Book Review in Communication Quarterly. Forthcoming. (review)

Fraser, Steve & Lowe, James K. "Assessment: Roadmap for Change." AACSB Continuous Improvement Seminar. St.Louis, MO. September 2003.(presentation)

REFEREED:

Armacost Andrew P., Lowe, James K., "Decision Support for the Career Field Selection process at the US Air Force Academy." European Journal of Operational Research. Forthcoming.

Davis, Kevin J., et al. "Assessment within Cost Accounting"

Millis, Barbara J., Lowe, James K., Aretz, Anthony J., "Making Program Assessment Work." Liberal Education. Vol.89, No. 3. Summer 2003.

Armacost, Andrew P., Lowe, James K. "OR Projects Course." INFORMS Transactions on Education. Feb 2003.

Lowe, James K., Gale, Debbie. "Laboratory Equipment Purchases: A Multidimensional Approach." The Journal of Cost Analysis & Management, Winter 2002.

Armacost, A, Lowe, JK. "Career Field Decision Support System." Academy of Management. Denver, Co. 2002.

Baker, Stephen, Green, Steve, Lowe, JK. "Strategic Mission Implementation: A Value Focused Approach." Military Operations Research, Vol 5, No. 4, 2000.

Lowe, JK, Green, S, "Performance-Based Budgeting: A Decision Analysis Perspective." Institute of Management Accounting Rocky Mountain Regional Council Educational Workshop, Colorado Springs CO, 5 Feb 99. (Presentation)

Baker, Stephen, Green, Steve, Lowe, JK. "Strategic Decision Making using Value Focused Hierarchies." Proceedings. Military Operations Research Society (MORS) Symposium. West Point, NY. Jun 99.

Hague, D, Newton, H, Lowe, JK. "ROTC Viability Study." Proceedings. MORS Monterey, CA. Jun 98.

Lowe, JK, Melese F. "Decision Hierarchies and Cost." Proceedings. 1st Joint International Society of Parametric Analysts and Society of Cost Estimators and Analysts (ISPA/SCEA). Toronto, Canada. Jun 1998.

Parker, M, Lowe, JK. "OR Case Studies and Consultation at the Air Force Academy." Mathematica Militaris, Vol. 8, Issue 1. Spring 98.

Davis, KJ, Weeks, MR, Lowe, JK. "USAF Pilot Training Capacity Analysis – Simulation." Case Study, Faculty Guide. Western Decision Sciences Institute Conference. Lake Tahoe, CA. Apr 98.

Lowe, JK, Weeks, MR. "Quick Response Simulation: Laughlin AFB Capacity Analysis." Phalanx, Vol. 30, No 1. Mar 98.

Melese, F, Lowe, JK, Stroup, M. "Characteristics Approach to Decision Making." Phalanx, Vol. 29, No 4. Dec 97.

Melese, F, Lowe, JK. "The Characteristics Approach and Multi-Attribute Evaluation: An Economic Perspective." Proceedings. MORS Symposium. Col. Spgs., CO. Jun 1994.

Lowe, JK. "Sloat Parish Paper Copiers: A Case Study." Proceedings. Western Casewriters/Western Academy of Management Conference, Albuquerque, NM. Mar 1994.

Webb, N, Chermak, J, Lowe, JK. "Discount Analysis within the DOD: A New Look." Proceedings. Western Economics Association Conference. Lake Tahoe, CA. July 1993.

Lowe, JK, Melese F. "Alternative Approaches to Budget Cuts in the DOD." Proceedings. 22nd Annual Western DSI Conference. San Diego. Mar 1993.

Lowe, JK, Melese F. "Downsizing within the DOD: A Marginal Analysis Approach." Navy Comptroller. Winter 1992.

Melese, F, Lowe, JK. "Effectiveness Analysis: An Overview of Techniques." Proceedings. Effectiveness Analysis Symposium in conjunction with Annual Decision Sciences Institute (DSI) Conference. Monterey, CA. Nov 1992.

Blair, CE, Jeroslow, RG, Lowe, JK. "Some Results and Experiments in Programming Techniques for Propositional Logic." Computers and Operations Research. 1986.

Jeroslow, RG, Lowe, JK. "Experimental Results on the New Techniques for Integer Programming Formulations." Journal of the Operational Research Society 36, No. 5 1985

Jeroslow, RG, Lowe, JK. "Modeling with Integer Variables." Mathematical Programming Study, Vol. 22. 1984.

NON-REFEREED:

Anna, A, Chesley, J, Davis, KJ, Lowe, JK, and Strbiak, C, "Chief of Staff Organizational Assessment Survey: Results and Recommendations." Briefed to CSAF. 20 January 2000.

Lowe, JK, Davis, KJ, "Decision Models" US Russian Bilateral Agreement Environmental Management Course. Colorado Springs, CO, 14 Dec 99. (Presentation)

Lowe, JK, Green, S, "Decision Making in a Resource Constrained Environment." US-Russian Bilateral Agreement Environmental Management Conference." Colorado Springs CO, 1 Oct 98. (Presentation)

Baker, S, Lowe, JK. "OR Consultation, Education, and Community Service." American Production and Inventory Control (APICS) Pikes Peak Chapter. Invited Presentation. Colorado Springs, CO. Apr 1999 /98 /97 (scheduled for Apr 2000).

Lowe, JK, Armacost, A. "External Review of the OR Curriculum: Graduate and Supervisor Survey." Presentation. Colorado Regional Higher Education Assessment Conference. Golden, CO. Apr 1998.

Lowe, JK, Green, S, Davis, KJ. "Integrating Outcomes and Technology: Three Examples of the Academy Experience." Presentation. Microcomputers in Education Conference. Tempe, AZ. Feb 1998.

Lowe, JK, Baker, S. "JSTARS: A Logistics Simulation Case Study". Presentation. 10th International TIMS Conference. Anchorage, AK. Jun 1994.